Maxima 318

(Bare Galvalume & Painted Galvalume)

SECTION PROPERTIES						TOP IN COMPRESSION			BOTTOM IN COMPRESSION		
GAUGE	FY (KSI)	WEIGHT (PSF)	V_a kip/ft.	P_{a_end} lbs/ft.	P_{a_int} lbs/ft.	I_x (in.^{4}/ft.)	S_e (in.^{3}/ft.)	M_a kip-in./ft.	I_x (in.^{4}/ft.)	S_e (in.^{3}/ft.)	M_a kip-in./ft.
22	50.0	1.78	1.0807	161.40	493.27	0.5153	0.2062	6.1747	0.2667	0.1659	4.9687

1. Section properties are calculated in accordance with the 2007 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
2. Va is the allowable shear.
3. Pa is the allowable load for web crippling on end & interior supports.
4. Ix is for deflection determination.
5. Se is for bending.
6. Ma is the allowable bending moment.
7. All values are for one foot of panel width.

Allowable Uniform Loads (PSF)

		Span in Feet															
Span Type	Load Type	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50
Single	Positive Wind	500	500	500	500	457	336	257	203	164	136	114	97	84	73	64	56
	Live	500	500	500	500	457	336	257	203	164	136	114	97	84	73	64	56
	Deflection (L/180)	500	500	500	500	500	500	500	494	360	270	208	164	131	106	87	73
	Deflection (L/240)	500	500	500	500	500	500	500	370	270	203	156	123	98	80	65	55
2 Span	Positive Wind	500	500	500	420	310	237	186	150	123	103	87	75	65	57	50	44
	Live	500	500	500	420	310	237	186	150	123	103	87	75	65	57	50	44
	Deflection (L/180)	500	500	500	500	500	500	500	500	500	494	381	299	240	195	160	134
	Deflection (L/240)	500	500	500	500	500	500	500	500	493	371	285	224	180	146	120	100
3 Span	Positive Wind	500	500	500	487	365	282	224	182	150	126	107	92	80	70	62	55
	Live	500	500	500	487	365	282	224	182	150	126	107	92	80	70	62	55
	Deflection (L/180)	500	500	500	500	500	500	500	500	500	387	298	234	188	152	125	105
	Deflection (L/240)	500	500	500	500	500	500	500	500	386	290	223	176	141	114	94	78
4 Span	Positive Wind	500	500	500	466	347	268	212	171	141	118	100	86	75	65	58	51
	Live	500	500	500	466	347	268	212	171	141	118	100	86	75	65	58	51
	Deflection (L/180)	500	500	500	500	500	500	500	500	500	411	316	249	199	162	133	111
	Deflection (L/240)	500	500	500	500	500	500	500	500	410	308	237	186	149	121	100	83
ASTM E1592 Wind Uplift Testing		106	91	76	66	59	54	50	46	42							

Notes:

1. Allowable uniform loads are based upon equal span lengths.
2. Positive Wind is wind pressure and is **NOT** increased by 33 1/3 %.
3. Live is the allowable live or snow load.
4. Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
5. Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
6. The weight of the panel has **NOT** been deducted from the allowable loads.
7. Positive wind and Live load values are limited to combined shear & bending using Eq. C3.3.1-1 of the AISI Specification.
8. Values of ASTM E1592 Wind Uplift Testing include a factor of safety of 2.0. Shaded areas are outside of test range. Contact McElroy Metal for more information.
9. Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
10. Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
11. Load Tables are limited to a maximum allowable load of 500 psf.